



RELIABLE ENTERPRISE VALUATION METHODS: A CASE STUDY ON ROMANIA'S INVESTMENT FUNDS

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Abstract:

Professionals in enterprise valuation can use multiple methods and approaches for the valuation mission. To support them, the standards in the matter use the market approach, income approach, and cost approach. The market approach or comparison approach refers to determining the value of an entity or the common equity of an entity using direct comparison with other enterprises or similar shares traded on the free market (the price of which is public). The sources of information concerning such data are mainly the stock exchanges and the M&A (mergers and acquisitions) operations and preceding transactions with similar companies. The most common multiples in the market-based approach are PER (Price Earnings Ratio), PEG (Price Earnings to Growth), and EV/EBITDA. Within this study, we highlighted the extent to which these multiples reflect or not the market value of the companies analysed, as defined by the stock exchange mechanism. Furthermore, to achieve this goal we set out to establish the validity of three hypotheses regarding the ability of multiple-based methods to highlight a stock's market price. Using a quantitative approach and historical data we demonstrated that market-based multiples are a safe way to obtain an enterprise's fair value, pointing out that results vary slightly depending on the variables used.

JEL: M40, M41, M49

Keywords: valuation, investment funds, PER, PEG, EV/EBITDA, enterprise value, multiples

1. Introduction

Enterprise valuation is a highly complex activity involving knowledge from a variety of fields, such as accounting, finances, tax system, or law. Precisely this difficulty in the enforcement of valuation approaches stirs a particular interest for the specialists in the field, but it impedes at the same time.

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All endeavours in this respect must consider different characteristics (as defined in the business plan of the enterprise). There is an acute knowledge need concerning the methods of developing the financial statements, and of understanding accounting mechanisms on which the synthesis reports rely. The point is to revisit them to understand how value is formed. Such an approach must allow both the valuator and users of the valuation report to get a glimpse into the future of the enterprise from a financial perspective.

The comparison approach represents a procedure according to which the market value of a company results from the analysis of transactions with similar enterprises, their comparison with the enterprise undervaluation, and the determination of its value using multiples. A definition of the valuation multiple is *"a multiple computed by dividing the price of the guideline company's stock as of the valuation date by some relevant economic variable observed or calculated from the guideline company's financial statements"*. The denominator of the fraction may comprise non-financial elements (i.e., such as the number of customers, and the number of subscribers), depending on the specifics of the activity carried out by each enterprise.

The comparison approach is associated with general accounting principles. Its enforceability is considered easier compared to the other methods, particularly in what concerns updating treasury flows. It relies on the substitution principle, arguing that a decided and well-informed buyer does not pay more for an item than the amount necessary to buy a similar product with the same utility. It is all based on the idea that the transaction with similar goods (in this case, similar enterprises) provides a solid indication of the value of the valued entity.

2. Multiples used and literature review

It is well-known that the valuation of an enterprise involves, first of all, establishing the value of a stock issued by a company. After this stage, the value of the enterprise will be determined by weighting the number of stocks against the market value of a stock.

The role of the accounting information in determining the value of the enterprise and the extent to which multiples can express the value and variation of the stock exchange price represents an actuality topic. Through this study, I aim to analyse this issue for the investment funds and the energy company listed on the Bucharest Stock Exchange.

Starting from the information in the literature and the practice used in the field of valuation, the most representative indicators seem to be:

- Price Earnings Ratio (PER);
- Price Earnings to Growth (PEG);
- Multiple of EBITDA (EV/EBITDA).

Starting from the information featured above, we propose to formulate an answer to the question:

- Which market multiple (among the indicators PER, PEG and EV/EBITDA) is the best value indicator of a stock or an enterprise, respectively?

The hypotheses formulated to identify the answer to this question are the following:

H1: PER is a better indicator of the stock value and the enterprise value than PEG and EV/EBITDA.

H2: PEG provides more reliable values for the stock value and the enterprise value than EV/EBITDA.

H3: Multiple linear regression can show the correlation between the stock value determined based on performance indicators and the real stock value determined based on the stock exchange rate.

A value multiple or multiplier is defined as the result of dividing the value (price) expressed in monetary units into a financial variable. This method relies on the belief that the market provides enough information concerning the expectations and reactions of investors through the price generally paid for similar companies. There is a direct causality relationship between price and the economic-financial situation of the entity whose stocks were bought. Considering both the information on prices paid/accepted and the financial indicators of the enterprises (turnover, net profit, etc), one can calculate and obtain relevant and reliable multiples or multipliers for the evaluation process of an enterprise. It is obvious there is a connection between the value of a company and its profit.

On the other hand, multiple-based methods also receive a great deal of criticism. A multiple represents a concentration of much information in a number or a series of numbers. By combining several value factors in one variable or set of variables, multiples can make it difficult to disaggregate or allocate the effect of each indicator component (i.e., forecasted growth or risk) on value. The danger refers to the fact that this approach generates a simplistic and possibly erroneous interpretation. Furthermore, a multiple represents an image of the place a company occupies at a given moment, but it fails to encompass the dynamic and ever-changing nature of the business community and the competition. We will feature, in the following lines, a synthesis of the three indicators.

A. Price/Earnings Ratio (PER) Multiple

PER is one of the most common multiples in enterprise valuations, coined by Benjamin Graham in the 1930s. It is very popular due to its calculation formula and easy application to estimate the initial quoted price of a share on the market. It is defined as the ratio between the price of a share and the earnings per share.

$$PER = \frac{\text{Share price}}{\text{Earnings per share}} \quad (1)$$

PER plays a significant role, mainly when comparing unquoted and quoted entities. It is formed considering three factors: the future increase in net profit, the interest rate level, and the risk associated with profit evolution forecasts. It may be used only based on the belief that the activity risk (the market on which the enterprise activates, its products, potential growth) equals the financial risk (liquidity, profitability, solvency, etc). The

volatility of PER goes even further, and this equality is necessary but not sufficient (White et al., 2002). PERs also differ by the market to which we relate.

The PER ratio occupies a central place in both scientific research and investment practices; it was found to reflect market expectation of estimated growth, is strongly associated with risk (Zarowin, 1990; Thomas & Zhang, 2006; Wu, 2013). The indicator is widely used by analysts, brokers, and portfolio managers for investment strategies. PER is used to estimate the cost of equity capital; in addition, financial analysts use it often to justify their decisions or recommendations (Easton, 2004). In an often-cited study, Bradshaw (2002) concludes that 76% of the brokers use PER to justify their recommendations concerning stock purchase/sale. It is twice as used as the next most common variable. However, there is a scarcity of studies focusing on the relationship between PER and profitability, except for the analysis by Ohlson and Gao (2006) who used theoretical models to estimate the relationship between PER and the return on equity ratio (ROE).

Many studies have shown that the PER ratio provides a much more reliable image by using net profit forecasted for the next 12 months than the past profit achieved (Beaver & Morse, 1978; Zarowin, 1990; Thomas & Zhang, 2006).

The stock exchange rate used within PER may also differ from one analysis to another. Some experts prefer using the stock exchange rate on the date of the valuation, while others point out that an average exchange rate for the past 6-12 months is more representative. The application of PER results from multiplying *Output per share* by *Average PER of the sample*. Thus:

$$V_{\text{share}} = \text{Output per share} \times \text{average PER} \quad (2)$$

B. Price Earnings to Growth (PEG) Multiple

PEG is a very useful tool to determine the companies with potentially undervalued titles. However, the efficiency of using PEG as a valuation tool has been an open debate topic for specialists from the time Peter Lynch promoted it in 1989.

Schatzberg and Vora (2009) note that only a few studies have focused on the efficiency of the PEG indicator. The few studies focus, however, on potential improvements for PEG through additional variables, including risk and capital cost adjustments. Some authors have criticised this indicator because they do not trust the analysts' capacity to estimate accurately enough the forecasted earnings per share (Estrada, 2004). However, many other specialists dispute this claim (Choi et al., 2007; Easton, 2002; Easton, 2004), providing evidence that the EPS found by analysts before quarterly announcements range within 3% of the entire turnover.

The formula consists in dividing *PER* by a *g* variable that measures the expected level of increasing benefits. Hence, the shares of companies within the sample are more comparable because the PER increase component is diminished.

$$\text{PEG} = \frac{\text{PER}}{g} \quad (3)$$

There are several methods to increase earnings estimates. Estrada (2004) manifests a preference for models with timeframes using historical data to extrapolate the future earnings augmentation, while the others (e.g., Easton, 2004) use the method of consensus earnings estimates. It is normally an average of all forecasts issued by individual specialists following a certain share or financial tool.

Regardless of how we obtain the forecasted EPS, an implicit growth rate (g) can be calculated as follows:

$$g(\%) = \frac{\text{forecasted EPS} - \text{current EPS}}{\text{current EPS}} \times 100 \quad (4)$$

After estimating the average PEG of the activity sector, the value of a share can be estimated using the formula below:

$$V_{\text{share}} = \text{PEG}_{\text{sector}} \times \text{EPS}_{\text{company}} \times g_{\text{company}} \quad (5)$$

C. EV/EBITDA

For the American EBITDA, namely *Earnings before Interest, Taxes, Depreciation and Amortization*, the continental accounting counterpart is *Gross Operating Surplus* (GOS). EBITDA has been widely used since 2000, when the great number of mergers and acquisitions (M&As) meant that companies had to amortise in the consolidated financial statements a series of very high values, which had a negative influence on these accounts. Using EBITDA, it suddenly became easy to compare enterprises from different economic sectors and various countries because the indicator is not much prone to changes in accounting principles (it is calculated before amortisation, taxes, or expenses with provisions).

Compared to the type of EBITDA considered, there are several methods to calculate the indicator. The first is to use the outputs of the last financial year; a second one simplifies the data, using only the outputs of the last quarter, while the most common formula uses the data of the last 12 months.

It is worth mentioning that the indicator is a multiple associated with the global value of the enterprise, not associated with equity capitals.

$$\text{Multiple} = \frac{GVE}{EBITDA} = \frac{\text{Market value of capitals} + \text{Market value of debts} - \text{Cash}}{EBITDA} \quad (6)$$

where:

GVE = Global value of the enterprise;

EBITDA = Profit before interest, taxes, depreciation, and amortisation;

Market value of capitals = Stock exchange capitalisation (to which we add the minority interests and the preferential shares held in other entities)

The available cash of the enterprise is no longer included because the interests related to cash were not considered when determining the value of EBITDA.

$$V_k = \text{Multiple}_{\text{average}} \times \text{EBITDA}_{\text{company}} \quad (7)$$

3. The evolution of the stock exchange and the value market multiples

We started from a database relying on the information available at the Bucharest Stock Exchange. The source of the data is the quotations at the end of June and December, respectively, in the period 2017 – 2020 for five investment funds within the Premium category of the BVB (Bucharest Stock Exchange): SIF Banat – Crişana S.A., SIF Moldova S.A., SIF Transilvania S.A., SIF Muntenia S.A. and SIF Oltenia S.A.

The activity fields of the companies include as follows:

- sales and purchase of financial tools and derivatives;
- administration and management of stocks and bonds portfolios;
- management and assessment of risks associated with the capital market;
- other activities related to investments administration.

As made obvious by the presentation of the three multiples described above, their calculation method depends on the accounting information, namely, on the financial position and performance of the enterprise. Using the data provided by accounting (i.e., financial year output, EBITDA, total debts, and cash) and the market (i.e., stock exchange capitalisation and stock price), I determined the value of the PER, PEG, and EBITDA multiples.

We calculated the market multiples using the data within the annual financial statements of the entities (i.e., the balance sheet and the profit and loss account) identified on their websites. I estimated the g rate at 5% for the next five years using the method of consensus earnings estimates, as an average of the forecasts concerning the evolution of the five enterprises.

Considering that the determination of these multiples depends on the existence of profit, we did not calculate this parameter for the semesters when the enterprises recorded losses. We made the observations for eight timeframes (semesters) over four years.

Table 1: Calculation of multiples for the period 2017 – 2020

SIF Banat Crisana S.A.						
Period	Stock price	Stock exchange capitalisation	EPS	PER	PEG	EV/ EBITDA
Jun. 2017	1.940	1,064,767,579.92	0.15	13.09	2.62	14.29
Dec. 2017	2.770	1,440,400,000.00	0.16	17.70	3.54	16.83
Jun. 2018	2.530	1,315,600,000.00	0.13	18.92	3.78	20.71
Dec. 2018	2.040	1,055,619,876.96	0.13	12.13	2.43	14.87
Jun. 2019	2.220	1,148,762,807.28	0.15	14.88	2.98	15.47
Dec. 2019	2.730	1,412,667,776.52	0.15	10.55	2.11	13.18
Jun. 2020	2.270	1,174,635,843.48	0.31	7.36	1.47	7.05
Dec. 2020	2.200	1,138,413,592.80	0.31	7.09	1.42	12.12
SIF Moldova S.A.						
Period	Stock price	Stock exchange capitalisation	EPS	PER	PEG	EV/ EBITDA
Jun. 2017	0.967	1,003,919,263.19	0.12	8.14	1.63	8.38
Dec. 2017	1.410	1,463,832,638.16	0.12	11.87	2.37	5.97

Jun. 2018	1.380	1,398,187,262.88	0.16	8.48	1.70	8.29
Dec. 2018	1.208	1,223,920,444.61	0.16	8.37	1.68	24.68
Jun. 2019	1.325	1,342,462,408.20	0.05	26.76	5.35	26.83
Dec. 2019	1.6100	1,613,508,473.36	0.05	32.23	6.45	12.18
Jun. 2020	1.3100	1,312,854,720.56	0.13	10.31	2.06	10.12
Dec. 2020	1.2500	1,236,848,970.00	0.13	9.63	1.93	98.61
SIF Transilvania S.A.						
Period	Stock price	Stock exchange capitalisation	EPS	PER	PEG	EV/ EBITDA
Jun. 2017	0.2490	543,887,379.34	0.03	7.91	1.58	7.96
Dec. 2017	0.2430	530,781,659.35	0.03	7.71	1.54	8.86
Jun. 2018	0.2160	471,805,919.42	0.03	7.34	1.47	7.95
Dec. 2018	0.2150	469,621,632.76	0.03	6.88	1.38	8.97
Jun. 2019	0.2710	591,941,685.94	0.03	8.90	1.78	9.98
Dec. 2019	0.3920	856,240,372.29	0.03	6.81	1.36	9.08
Jun. 2020	0.3610	780,642,210.72	0.08	4.29	0.86	4.33
Dec. 2020	0.3440	743,880,666.17	0.08	4.32	0.86	24.69
SIF Muntenia S.A.						
Period	Stock price	Stock exchange capitalisation	EPS	PER	PEG	EV/ EBITDA
Jun. 2017	0.7960	642,401,065.94	0.06	12.75	2.55	13.41
Dec. 2017	0.9800	790,895,784.70	0.06	15.70	3.14	15.15
Jun. 2018	0.7660	618,189,970.49	0.06	12.12	2.42	12.39
Dec. 2018	0.5980	482,607,835.97	0.06	6.71	1.34	14.42
Jun. 2019	0.6300	508,433,004.45	0.03	22.30	4.46	22.02
Dec. 2019	0.8440	681,138,818.66	0.03	13.65	2.73	15.24
Jun. 2020	0.7100	572,995,925.65	0.16	5.12	1.02	5.62
Dec. 2020	0.8200	643,409,064.82	-	-	-	-
SIF Oltenia S.A.						
Period	Stock price	Stock exchange capitalisation	EPS	PER	PEG	EV/ EBITDA
Jun. 2017	1.7720	1,028,053,645.21	0.17	10.15	2.03	10.40
Dec. 2017	2.1800	1,264,761,256.52	0.17	12.49	2.50	19.41
Jun. 2018	2.0900	1,212,546,342.26	0.13	16.32	3.26	18.76
Dec. 2018	2.0850	1,209,645,513.69	0.13	11.48	2.30	18.98
Jun. 2019	2.0700	1,200,943,027.98	0.17	12.48	2.50	9.56
Dec. 2019	2.5600	1,485,224,227.84	0.17	10.60	2.12	11.45
Jun. 2020	2.2000	1,276,364,570.80	0.21	10.28	2.06	10.06
Dec. 2020	1.8000	939,868,457.40	0.24	7.51	1.02	21.63

4. Determining the most suitable indicator and calculating the value of stocks

To study the correlation between the stock values of the enterprises featured above determined on the basis of the three multiples and their real stock exchange rate in the period 2017 – 2020, I used the regression analysis method, using the software program SPSS v20.

The formula of the multiple linear regression method is the following:

$$Y = \alpha + \beta_1 X_1 + \dots + \beta_n X_n + \varepsilon \quad (8)$$

where:

Y = dependent variable;

α, β = regression coefficients;

$X_1 \dots X_n$ = independent variables;

ε = residual random variable or error.

The dependent variable used in the regression analysis is the average stock exchange rate, while the value of stocks calculated by applying the three market multiples is independent variables. We calculated them based on the information within the annual financial statements of the entities assessed (i.e., the balance sheet and the profit and loss account). I considered the average values of the indicators in the period under analysis (i.e., 2017 – 2020).

Table 2 features the data related to the five companies (i.e., stock price, average stock value determined by applying PER, average stock value determined by applying PEG and average stock value determined by applying EBITDA).

Table 2: Average values of stock price versus average stock values determined through PER, PEG, and EBITDA

Name	Avg. stock price	Avg. stock price through PER	Avg. stock price through PEG	Avg. stock price through EBITDA
SIF Banat Crisana S.A.	2.34	1.97	1.95	2.58
SIF Moldova S.A.	1.31	1.22	1.21	1.38
SIF Transilvania S.A.	0.29	0.43	0.43	0.54
SIF Muntenia S.A.	0.77	0.70	0.69	0.95
SIF Oltenia S.A.	2.10	1.94	1.92	2.00
Total	6.81	6.26	6.20	7.45

Source: Authors' Computation.

Table 3: Results of the correlation test between the dependent variable stock price and the independent variables value using PER, value using PEG, and value using EBITDA

Correlations		Price_avg_stock	value_PER	value_PEG	value_EBITDA
Pearson Correlation	Price_avg_stock	1.000	.995	.994	.987
	value_PER	.995	1.000	1.000	.969
	value_PEG	.994	1.000	1.000	.969
	value_EBITDA	.987	.969	.969	1.000
Sig. (1-tailed)	Price_avg_stock	.	.000	.000	.001
	value_PER	.000	.	.000	.003
	value_PEG	.000	.000	.	.003
	value_EBITDA	.001	.003	.003	.
N	Price_avg_stock	5	5	5	5
	value_PER	5	5	5	5
	value_PEG	5	5	5	5
	value_EBITDA	5	5	5	5

Table 4: Value of the correlation coefficient and determination report

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.999 ^a	.998	.996	.05800
a. Predictors: (Constant), value_EBITDA, value_PEG				
b. Dependent Variable: Price_avg_stock				

Table 5: ANOVA for multiple linear regression between the dependent variable stock price and the independent variables value using PER, value using PEG, and value using EBITDA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.997	2	1.498	445.442	.002 ^b
	Residual	.007	2	.003		
	Total	3.003	4			
a. Dependent Variable: Price_avg_stock						
b. Predictors: (Constant), value_EBITDA, value_PEG						

Table 6: Correlation coefficients

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.210	.059		-3.557	.071	-.464	.044
	value_PEG	.781	.169	.626	4.633	.044	.056	1.507
	value_EBITDA	.405	.144	.381	2.820	.106	-.213	1.023
a. Dependent Variable: Price_avg_stock								

Tables 2, 3, 4, 5, and 6 illustrate the values obtained through statistical testing (i.e., multiple linear regression). According to Table 3, Pearson's correlation coefficient is close to the absolute value 1 (i.e., a perfect correlation), suggesting a direct and strong correlation between the dependent variable (stock price) and the independent variables (PER, PEG, EBITDA).

Table 4 includes the determination report R Square, with a value of 0.998 (very close to 1), demonstrating the direct, linear, and close correlation between the stock price for the enterprises assessed and the stock value calculated by applying the multiples featured above.

Table 5 features the results of the variation analysis of the dependent variable under the influence of the regression and residual factor. The value of the F test is statistically significant, while the value of Sig. corresponding to the F statistics is below .05, proving that the linear correlation between the two variables is significant.

In Table 6 (showing the correlation coefficients), the value of the F test is statistically significant, while the value Sig. corresponding to the F statistics is below .05, demonstrating the linear correlation between the dependent variable and the 3 three independent variables. Hence, the statistical test has proven that the PER, PEG, and

EV/EBITDA multiples are useful in depicting a reliable image of the stock market value (for the companies within the sample). In addition, my analysis has shown that the value using the PER multiple has a coefficient of .995 compared to the value using the PEG multiple, with a coefficient of .994 and .987 using the EBITDA multiple, respectively. This output underscores that the PER multiple can explain (to a higher extent) the variation of stock price. Consequently, my study shows that the stock value resulting from applying the PER multiple is closer to its real stock exchange rate on the regulated market.

5. Conclusions

We believe we have attained our goal in valuing the five enterprises for the eight timeframes because we demonstrated the utility of the three indicators in the enterprise valuation process, but the results obtained are different. Hence, the PER indicator is the closest to the value determined using the stock exchange mechanism. Consequently, it is the best choice for such an endeavour. From this perspective, PEG and EBITDA also express values very close to the actual stock exchange rate (determined by the stock exchange).

We tested all three initial hypotheses, and the statistical analysis confirmed their reliability. Concerning the general question, we concluded that the PER multiple for stock and enterprise valuation, respectively (calculated relying on the financial and accounting information), expresses the closest image to the stock exchange value of the companies analysed. Thus, we recommend this indicator for the valuation of enterprises in general, especially those listed at the Bucharest Stock Exchange and particularly for companies focusing on financial investments.

Conflict of Interest Statement

The author of the present paper affirms that there are no conflicts of interest in relation with this research, and its results were not influenced by another party. The entirety of the paper is original and is the work of the author.

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Vlad Bulău is a PhD graduate from "Alexandru Ioan Cuza University" Iași, specializing in accounting and enterprise valuation. He published papers regarding subjects like financial auditing, accounting history, the role of foreign direct investments in a country's economy and economic analysis.

References

- Beaver W, Morse D, 1978. What determines price-earnings ratios? *Financial Analysts Journal*, 34(4):65-76
- Choi Y, S, Lin S, Walker M, Young S, 2007. Disagreement over the persistence of earnings components: Evidence on the properties of management specific adjustments to GAAP earnings. *Review of Accounting Studies*, 12(4):595-622
- Easton P, D, 2002. Does the PEG ratio rank stocks according to the market's expected rate of return on equity capital? *Ohio State University Working Paper*
- Easton P, D, 2004. PE ratios, PEG ratios, and estimating the implied expected rate of return on equity capital. *The Accounting Review*, 79(1):73-95
- Estrada J, 2004. Adjusting P/E ratios by growth and risk: A note. *Finance Letters*, 2(5):4-10
- Ohlson J, Gao Z, 2006. Earnings, Earnings Growth and Value. *Foundations and Trends in Accounting*, 1(1):15-28
- Pratt S, P, Niculita A, 2008. *Valuing a Business. The Analysis and Appraisal of Closely Held Companies*, 5th edition, The McGraw – Hill Companies, New York, USA
- Schatzberg J, D, Vora G, 2009. PEG investing strategy: A revisit. *Quarterly Journal of Finance and Accounting*, 48(2):5-22
- Thomas J, Zhang H, 2006. Another look at E/P ratios. *Yale School of Management Working Paper*
- White G, Sandhi A, Fred D, 2002. *The analysis and use of financial statements*, 3rd edition, Wiley Publishing, New Jersey, USA
- Wu W, 2013. The forward E/P ratio and earnings growth, *University of Massachusetts Working Paper*
- Zarowin P, 1990. Size, Seasonality, and Stock Market Overreaction. *Journal of Financial and Quantitative Analysis*, 25(1):113-125

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